CLAIMS

- 1. Medium for detecting and/or identifying microorganisms present in a sample, comprising a culture medium and at least one substrate that can be hydrolysed to a labelled product by at least a first enzyme not free in the sample, and specific for said microorganisms, characterized in that it also comprises at least one inhibitor of at least a second enzyme, different from the first enzyme or identical to it, but free in said sample and not originating from a microorganism.
- 2. Detection and/or identification medium according to Claim 1, <u>characterized in that</u> the microorganism is a bacterium.
 - 3. Detection and/or identification medium according to Claim 2, <u>characterized in that</u> said bacterium belongs to the *Salmonella* genus.
 - 4. Detection and/or identification medium according to Claim 1, <u>characterized in that</u> the microorganism is a yeast.
 - 5. Detection and/or identification medium according to Claim 4, <u>characterized in that</u> said yeast belongs to the *Candida* genus.
 - 6. Detection and/or identification medium according to any one of Claims 1 to 5, characterized in that said first enzyme is an esterase.
- 7. Detection and/or identification medium according to Claim 6, <u>characterized in that</u> the inhibitor is a compound of formula (I)

$$\begin{array}{c|c}
R_3 & O & R_1 \\
\hline
O & R_2
\end{array}$$

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in which R₁ is a hydrogen atom, or an alkyl, aryl or halogen group, R₂ is a hydrogen atom, or an alkyl, aryl or halogen group, R₃ is nothing, or an alkyl, aryl or NO₂ group.

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8. Detection and/or identification medium according to Claim 7, <u>characterized in that</u> the inhibitor is O,O-diethyl p-nitrophenyl phosphate and/or O,O-dimethyl p-nitrophenyl phosphate and/or O,O-di-(2-chloroethyl)-O-(3-chloro-4-methyl-coumarin-7-yl) phosphate and/or at least one derivative of these molecules.

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9. Detection and/or identification medium according to Claim 8, <u>characterized in that</u> the concentration of O,O-diethyl p-nitrophenyl phosphate or its derivative in the detection medium is between 0.1 and 15 mg/l, preferably between 1 and 10 mg/l.

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10. Detection and/or identification medium according to Claim 8, <u>characterized in that</u> the concentration of O,O-dimethyl p-nitrophenyl phosphate or its derivative in the detection medium is between 0.1 and 100 mg/l, preferably between 10 and 50 mg/l.

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11. Detection and/or identification medium according to Claim 8, <u>characterized in that</u> the concentration of O,O-di-(2-chloroethyl)-O-(3-chloro-4-methylcoumarin-7-yl) phosphate or its derivative in the detection medium is between 1 and 1000 mg/l, preferably between 30 and 100 mg/l.

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- 12. Detection and/or identification medium according to any one of Claims 1 to 5, characterized in that said first enzyme is an osidase, preferably a glucosidase.
- 13. Detection and/or identification medium according to any one of Claims 12,

 characterized in that the inhibitor is a compound of formula (II):

(II)

or a derivative of this compound.

- 14. Detection and/or identification medium according to Claim 13, <u>characterized in that</u> the concentration of compound of formula (II) or its derivative in the detection medium is preferably between 1 and 10 g/l, and even more preferably between 2 and 8 g/l.
- 15. Detection and/or identification medium according to any one of Claims 1 to 14, characterized in that said substrate is a chromogenic substrate, preferably an ester of indoxyl or of its derivatives.
- 16. Method for detecting and/or identifying microorganisms, comprising:
 - seeding the microorganisms to be identified onto a detection medium,
 according to any one of Claims 1 to 15,
 - incubating the detection medium seeded with the microorganisms to be identified, and
 - determining the presence of microorganisms by detecting the substrate(s) hydrolysed to a labelled product.

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- 17. Use of the detection and/or identification medium according to any one of Claims 1 to 15, for identifying microorganisms.
- 18. Use of a compound of formula (I)

in which R₁ is a hydrogen atom, or an alkyl, aryl or halogen group,
R₂ is a hydrogen atom, or an alkyl, aryl or halogen group,
R₃ is nothing, or an alkyl, aryl or NO₂ group,
for inhibiting a free enzyme in a sample.

19. Use of a compound of formula (II)

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for inhibiting a free enzyme in a sample.